C of C

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent No. 7,138,418	)	Serial No. 09/972,743
	)	
Inventor(s): John FLYGARE *et al*	)	Filed: October 5, 2001
	)	
Issue Date: November 21, 2006	)	Attorney Docket No. 006539.00194

For: PENTAFLUOROBENZENESULFONAMIDES AND ANALOGS

REQUEST FOR CERTIFICATE OF CORRECTION

U.S. Patent and Trademark Office
Customer Service Window
Randolph Building, Mail Stop: Certificate of Correction Branch
401 Dulany Street
Alexandria, VA 22314

Sir:

Pursuant to 35 U.S.C. § 254 and 37 C.F.R. § 1.322, this is a request for the issuance of a Certificate of Correction in the above-identified patent. Two (2) copies of PTO Form 1050 are appended. The complete Certificate of Correction involves one page.

The mistakes identified in the appended Form occurred through no fault of the Applicants, as clearly disclosed by the records of the application, which matured into this patent. Enclosed for your convenience the relevant portions of the Amendment filed June 27, 2006.

Issuance of the Certificate of Correction containing the corrections is respectfully requested. Since these changes are necessitated through no fault of the Applicants, no fee is believed to be associated with this request. Nonetheless, should the Patent and Trademark Office determine that a fee is required, please charge our Deposit Account No. 19-0733.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: 4-11-2007

By: _____
Joseph M. Skerpon
Registration No. 29,864

Banner & Witcoff, Ltd
1100 13th Street, N.W., Suite 1200
Washington, D.C. 20005-4051
(202) 824-3000

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.: 7,138,418

DATED: November 21, 2006

INVENTOR(S): John FLYGARE *et al*

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 49, Claim 7, Lines 66-67:
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

In Column 50, Claim 7, Line 1:
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

In Column 51, Claim 8, Line 1:
Please replace "—$S(O^2)$—" with -- —$S(O_2)$— --

In Column 51, Claim 15, Lines 28 and 29 (2 instances):
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

In Column 53, Claim 28, Lines 12-13:
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

In Column 54, Claim 28, Line 1:
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

Mailing Address of Sender:

Banner & Witcoff, Ltd.
11th Floor
1001 G Street, N.W.
Washington, DC 20001-4597

U.S. PAT. NO 7,138,418

No. of add'l copies
@ $0.50 per page

☐

FORM PTO 1050 (Rev.2-93)

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.: 7,138,418

DATED: November 21, 2006

INVENTOR(S): John FLYGARE *et al*

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 49, Claim 7, Lines 66-67:
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

In Column 50, Claim 7, Line 1:
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

In Column 51, Claim 8, Line 1:
Please replace "—$S(O^2)$—" with -- —$S(O_2)$— --

In Column 51, Claim 15, Lines 28 and 29 (2 instances):
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

In Column 53, Claim 28, Lines 12-13:
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

In Column 54, Claim 28, Line 1:
Please replace "pentafluorophenylsulfonamidopyridine" with --pentafluorophenylsulfonamidopyrimidine--

Mailing Address of Sender:

Banner & Witcoff, Ltd.
11th Floor
1001 G Street, N.W.
Washington, DC 20001-4597

No. of add'l copies
@ $0.50 per page

☐

FORM PTO 1050 (Rev.2-93)

IFW AF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	John Flygare, et al.	Confirmation No. 5345	
Serial No.:	09/972,743	Group Art Unit No.:	1624
Filed:	October 5, 2001	Examiner:	Deepak R Rao
For:	PENTAFLUOROBENZENESULFONAMIDES AND ANALOGS	Customer No. 22907	
Docket No.:	T96-001-2A-1-2/US (006539.00194)		

AFTER FINAL AMENDMENT UNDER 37 CFR §1.116 and 1.121

U.S. Patent and Trademark Office
Customer Service Window, Mail Stop AF
Randolph Building
401 Dulany Street
Alexandria, VA 22314
Sir:

In response to the Office Action dated March 31, 2006, applicants request reconsideration of the pending claims.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 12 of this paper.

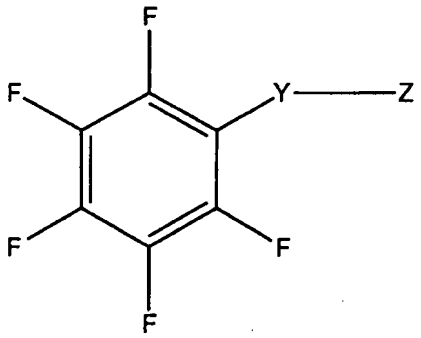
A Terminal Disclaimer accompanies this response. Please charge our deposit account no. 19-0733 for the required fee. It is believed that no additional fee is required for this filing. However, if an additional fee is required, please charge our deposit account no. 19-0733 for that fee as well.

Amendments to the Claims

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

Claim 1 (Previously Presented) A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound of formula I:



I

or a pharmaceutically acceptable salt thereof, wherein:

Y is –S(O) or $-S(O)_2-$; and

Z is $-NR^1R^2$; wherein R^2 is optionally substituted heteroaryl and R^1 is selected from hydrogen

substituted or unsubstituted (Cl-C10)alkyl,
substituted or unsubstituted (C1-C10)alkoxy,
substituted or unsubstituted (C3-C6)alkenyl,
substituted or unsubstituted (C2-C6)heteroalkyl,
substituted or unsubstituted (C3-C6)heteroalkenyl,
substituted or unsubstituted (C3-C6)alkynyl,
substituted or unsubstituted (C3-C8)cycloalkyl,
substituted or unsubstituted (C5-C7)cycloalkenyl,
substituted or unsubstituted (C5-C7)cycloalkadienyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aryloxy,
substituted or unsubstituted aryl-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(C5-C7)cycloalkenyl,

substituted or unsubstituted aryloxy-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(Cl-C4)alkyl,

substituted or unsubstituted aryl-(C1-C4)alkoxy,

substituted or unsubstituted aryl-(C3-C6)alkenyl,

substituted or unsubstituted aryloxy-(C1-C4)alkyl,

substituted or unsubstituted aryloxy-(C2-C4)heteroalkyl,

substituted or unsubstituted heteroaryl,

substituted or unsubstituted heteroaryloxy,

substituted or unsubstituted heteroaryl-(C1-C4)alkyl,

substituted or unsubstituted heteroaryl-(Cl-C4)alkoxy,

substituted or unsubstituted heteroaryl-(C1-C4)heteroalkyl,

substituted or unsubstituted heteroaryl-(C3-C6)alkenyl,

substituted or unsubstituted heteroaryloxy-(CI-C4)alkyl, and

substituted or unsubstituted heteroaryloxy-(C2-C4)heteroalkyl,

provided that:

in the case that Y is $-S(O_2)-$, and R^1 is hydrogen or methyl, then R^2 is substituted heteroaryl group:

in the case that Y is $-S(O_2)-$, and R^2 is a ring system chosen from 5-quinolyl, or 4-pyridyl, then either R^1 is not hydrogen or R^2 is substituted by at least one substituent that is not hydrogen;

in the case that Y is $-S(O_2)-$ and R^2 is 2-methylbenzothiazol-5-yl, 6-hydroxy-4-methyl-pyrimidin-2-yl, 3-carbomethoxypyrazin-2-yl, 5-carbomethoxypyrazin-2-yl, 4-carboethoxy-l-phenylpyrazol-5-yl, 3-methylpyrazol-5-yl, 4-chloro-2-methylthiopyrimidin-6-yl, 2-trifluoromethyl-l-,3-,4-thiadiazol-5-yl, 4-methylthiazol-2-yl, 6,7-dihydroindan-5-yl, 7-chloro-5-methyl-l,8-naphthyridin-2-yl, 5,7-dimethyl-1,8-naphthyridin 2-yl, or 3-cyanopyrazol-4-yl, then R^1 is a group other than hydrogen.

Claim 2 (Previously presented) The composition of claim 1 wherein

Y is $-S(O)_2-$.

Claim 3 (Previously Presented) The composition of claim 2, wherein R^1 is hydrogen or lower alkyl, and R^2 is optionally substituted pyridyl.

Claim 4-10 (Canceled)

Claim 11 (Previously Presented) The composition of claim 1, wherein the compound is 5-Pentafluorophenylsulfonamidoindazole, or 5-Pentafluorophenylsulfonamidoindole.

Claim 12-17 (Canceled)

Claim 18 (Previously presented) The composition of claim 1, wherein the compound is selected from the group consisting of 4-Methyl-6-methoxy-2-pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-Pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; 5-Pentafluorophenylsulfonamidobenzo[a]thiophene; 5-Pentafluorophenylsulfonamidobenzo[a]furan; 5-Pentafluorophenylsulfonamidoindazole; 2-Methoxy-5-Pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claims 19-40 (Canceled)

Claim 41 (original) The composition of claim 2, wherein R^1 is an optionally substituted (C2-Cl0)alkyl or optionally substituted (C2-C6)heteroalkyl.

pyrimidin-2-yl, 3-carbomethoxypyrazin-2-yl, 5-carbomethoxypyrazin-2-yl, 4-carboethoxy-l-phenylpyrazol-5-yl, 3-methylpyrazol-5-yl, 4-chloro-2-methylthiopyrimidin-6-yl, 2-trifluoromethyl-l-,3-,4-thiadiazol-5-yl, 4-methylthiazol-2-yl, 6,7-dihydroindan-5-yl, 7-chloro-5-methyl-l,8-naphthyridin-2-yl, 5,7-dimethyl-1,8-naphthyridin 2-yl, or 3-cyanopyrazol-4-yl, then R^1 is a group other than hydrogen;
wherein said compound has pharmacological activity; and
with the proviso that heteroaryl is other than 4-pyrimidyl.

Claim 62 (Previously Presented) The compound of claim 61, wherein R^1 is hydrogen or lower alkyl, and Y is $-S(O_2)$.

Claims 63-94 (Canceled)

Claim 95 (Previously Presented) A pharmaceutical composition of claim 1, wherein R^1 is hydrogen or lower alkyl, and Y is $-S(O_2)$.

Claim 96 (Previously Presented) A method of claim 43, wherein R^1 is hydrogen or lower alkyl, and Y is $-S(O_2)$.

Claim 97 (canceled)

Claim 98 (Previously presented) A compound of claim 61, wherein the compound is selected from the group consisting of 5-Pentafluorophenylsulfonamidoindazole; 5-Pentafluorophenylsulfonamidoindole, 4-Methyl-6-methoxy-2-pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-Pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; 5-Pentafluorophenylsulfonamidobenzo[a]thiophene; 5-Pentafluorophenylsulfonamidobenzo[a]furan; 2-Methoxy-5-

Pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claim 99 (Previously presented) A method of claim 43, wherein the compound is selected from the group consisting of 5-Pentafluorophenylsulfonamidoindazole; 5-Pentafluorophenylsulfonamidoindole, 4-Methyl-6-methoxy-2-pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-Pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; 5-Pentafluorophenylsulfonamidobenzo[a]thiophene; 5-Pentafluorophenylsulfonamidobenzo[a]furan; 2-Methoxy-5-Pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claim 100 (Previously presented) A compound of claim 61, wherein R^1 is an optionally substituted (C2-C10)alkyl or optionally substituted (C2-C6)heteroalkyl.

Claim 101 (Previously presented) A method of claim 44, wherein R^1 is an optionally substituted (C2-C10)alkyl or optionally substituted (C2-C6)heteroalkyl.

Claim 102 (Previously presented) A pharmaceutical composition of claim 1, wherein said compound is capable of increasing LDL receptor gene expression in a cell.

Claim 103 (Previously presented) A method of claim 43 wherein said compound is capable of increasing LDL receptor gene expression in a cell.

Claim 104 (Previously presented) A method of claim 43, wherein R^2 is a monocyclic heteroaryl group.